

REMARKS

Claim 9 has been amended. Claims 9 to 21 remain active in the subject application.

The required amendment to the specification can be found in the Preliminary Amendment filed in the subject application.

A new Abstract of the Disclosure is attached hereto.

A substitute drawing is attached hereto. However, the feature 410 cannot be found in the drawing. If the objection is repeated, the examiner is kindly requested to indicate where the feature is located.

Claim 9 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. This claim has been amended to overcome the rejection.

Claim 9 was rejected under 35 U.S.C. 102(b) as being anticipated by Kiyokawa (U.S. 6,019,564). The rejection is respectfully traversed.

In addition to other features, this claim requires a flipping device for flipping a substrate so that a side of the substrate that was formerly resting on the bottom of the tray is now facing upwards. No such feature is taught or suggested by Kiyokawa either alone or in the combination as claimed.

Claims 9 to 13 and 15 to 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia (U.S. 5,785,484) I view of Dudderar (U.S. 6,205,745). The rejection is respectfully traversed.

Claim 9 requires, among other features, a plate with a plurality of protrusions, each of said protrusions extending through a different said hole and maintaining level or leveling the substrate in the corresponding depression while lifting said substrate

concurrently with the other of the plurality of substrates in the other of said depressions. No such structure is taught or even remotely suggested by Garcia either alone or in the combination as claimed. In fact, there is no provision in Garcia whatsoever for leveling of a substrate in the manner claimed. It follows that the combination with Dudderar is only suggested by the subject disclosure and not by the cited art, even were Dudderar to teach leveling of a substrate or a chip, which it does not. The combination is therefore improper.

In addition, a review of Dudderar will reveal that Dudderar does not level or flip a substrate but rather flips a chip carrier tape. This relates to an entirely different problem than leveling a substrate and has nothing whatsoever to do with the direct leveling of a substrate or a semiconductor chip.

Claims 10 to 13 and 15 to 18 depend from claim 9 and therefore define patentably over the applied references for at least the reasons presented above with reference to claim 9.

Claim 19 requires, among other features, a flipping station coupled to the loader station, the flipping station to flip substrates held in the substrate tray, the flipping station comprising a plate with a plurality of protrusions, a flipping device with a plurality of vacuum pads coupled to the substrate tray, the flipping device to attach to the substrates, lift the substrates out of the substrate tray, and flip the substrates and a first actuator coupled to the plate, the first actuator to raise and lower the plate. No such structure is taught or even remotely suggested by Garcia. In fact, there is no provision in Garcia whatsoever for flipping a substrate. It follows that the combination with Dudderar is only

suggested by the subject disclosure and not by the cited art, even were Dudderar to teach flipping of a substrate of chip, which it does not. The combination is therefore improper.

In addition, a review of Dudderar will reveal that Dudderar does not flip a substrate but rather flips a chip carrier tape. This is an entirely different problem than flipping a substrate and has nothing whatsoever to do with the direct flipping of a substrate or a semiconductor chip.

Claims 20 and 21 depend from claim 20 and therefore define patentably over the applied references for at least the reasons presented above with reference to claim 19.

Claim 14 was rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia and Dudderar in view of Beyer (U.S. 6,003,676). The rejection is respectfully traversed.

Claim 14 depends from claim 9 and therefore defines patentably over the applied references since Beyer fails to overcome the deficiencies of the other applied references.

In view of the above remarks, favorable reconsideration and allowance are respectfully requested.

Respectfully submitted,



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